

*Complete
for 1920*

The Municipality of George Town, PENANG.

STRAITS SETTLEMENTS.

HEALTH OFFICER'S ANNUAL REPORT For the Year 1924.

Price 50 cents per copy.

OBTAINABLE FROM THE MUNICIPAL SECRETARY.

C. A. RIBEIRO & CO., LTD., PRINTERS,
PENANG.
1925



Digitized by the Internet Archive
in 2019 with funding from
Wellcome Library

<https://archive.org/details/b31487245>

STATISTICAL SUMMARY.

Situation	..	..	..	..	Lat. 5° 24' N., Long. 100° 1' E.
Average Elevation above L.W.M.O.S.T.	..				<div style="display: flex; align-items: center;"> <div style="font-size: 3em; margin-right: 5px;">{</div> <div> Town area 12 ft. 6 ins. Country area 25 ft. 0 in. </div> </div>
O. S. Tides rise and fall	..	..			9 ft. 0 in.
Rainfall 1924 (average of three readings within Municipal Limits)	..	..			108.07 inches.
Mean Temperature 1924	..	..			80.9°F.
Maximum do.	..	..	..		94.00°F.
Minimum do.	..	..	..		68.00°F.
Total area of Penang Island	..	..			108 sq. miles.
Area within Municipal Limits	..	..			9.4 sq. miles or 5803 acres.
Estimated population (mid-year)			..		130,810.
Density of population	..	..	..		22.5 per acre.
Crude Death Rate	..	..	..		29.13 per mille.
Infant Mortality	..	..	..		151.
Birth Rate	..	..	..		32.54 per mille.
Sterling equivalent of \$1/-	..	..	..		2s. 4d. (approximately).

STAFF OF THE HEALTH DEPARTMENT ON 31st DECEMBER, 1924.

J. STUART ROSE	..	M.B., D.P.H.			
		Health Officer,			
		Registrar of Births and Deaths,			
		Deputy Superintendent of Vaccination,			
		Registrar of Midwives,			
		Medical Superintendent of Infectious Diseases Hospital,			
		Medical Superintendent of Chinese Small-pox Hospital.			
G. S. GLASS	..	B.A., M.B., D.P.H., D.T.M. and H.			
		Deputy Health Officer,			
		Deputy Registrar of Births and Deaths,			
		Deputy Superintendent of Vaccination.			
KHOO TIANG PHEAN	..	M.B., B.S. (Hong Kong)			
		Deputy Registrar of Deaths.			
W. A. WARD	..	Chief Sanitary Inspector, joined the service	1st January	1893	
A. A. JEREMIAH	..	Sanitary Inspector, joined the service	1st January	1904	
J. S. REUTENS	..	do.	do.	1st January	1905
H. L. McCULLOCH	..	do.	do.	1st January	1912
R. J. RANGEL	..	Sanitary Sub-Inspector	do.	1st October	1913
B. B. PETERS	..	do.	do.	1st May	1918
G. MARTINEZ	..	do.	do.	1st Nov.	1918
M. D'SOUZA	..	do.	do.	1st April	1919
J. LOH	..	do.	do.	17th May	1921
OW LEONG CHYE	..	do.	do.	1st July	1921
E. V. LESSLER	..	do.	do.	1st July	1921
V. E. ROZELLS	..	do.	do.	1st Sept.	1921
LIM THEAN SOO	..	do.	do.	1st Sept.	1921
F. A. SCULLY	..	do.	do.	1st May	1922
YEAP HIN TAT	..	do.	do.	14th August	1922
LIM KHAY SENG	..	do.	do.	1st March	1923
LO SIEW TEAN	..	do.	do.	1st July	1923
TEOH CHENG HOE	..	do.	do.	1st Dec.	1923
M. S. D'ORVILLE	..	do.	do.	18th Feb.	1924
MISS J. A. G. RONALD	..	District Nurse	do.	9th January	1923
MISS C. M. GOLD	..	do.	do.	9th April	1923
Eight Qualified Chinese Midwives as part time District Nurses.					

MUNICIPAL HEALTH OFFICE,
PENANG, 27TH FEBRUARY, 1925.

To.
THE MUNICIPAL COMMISSIONERS,

GENTLEMEN,

I have the honour to submit the following report on the health of the Municipality during 1924.

POPULATION.

1. The estimated population was 130,810 divided among the various nationalities as follows:—

TABLE I.

Nationality.				Males.	Females.	Total.
European	...	...	...	678	396	1,074
Eurasian	...	...	...	693	819	1,512
Chinese	...	...	...	53,604	35,612	89,216
Malay	...	...	...	8,668	8,823	17,491
Indian	...	...	...	15,692	4,521	20,213
Others	...	...	...	756	548	1,304
Total				80,091	50,719	130,810

BIRTHS.

2. There were 4257 births registered of whom 2290 were males and 1967 females, the birth rate being 32.54 per thousand. The figures for 1923 were, births 4028 and birth rate 31.39.

Reckoned on the estimated female population alone the birth rate was 83.93 per thousand compared to 81.36 per thousand in 1923.

The number of births and the birth rates for the various nationalities were as follows:—

TABLE II.

Nationality.		NUMBER OF BIRTHS.			BIRTH RATE PER THOUSAND.	
		Males.	Females.	Total.	Total population.	Female population.
European	...	32	21	53	49.35	133.84
Eurasian	...	38	16	54	35.71	65.93
Chinese	...	1,557	1,346	2,903	32.54	81.52
Malay	...	345	315	660	37.73	74.80
Indian	...	299	245	544	26.91	120.33
Others	...	19	24	43	32.98	78.47

During the previous ten years the births registered were:—

TABLE III.

Year.	European.	Eurasian.	Chinese.	Malay.	Indian.	Others.	Total.
1914	27	57	1,575	368	445	72	2,545
1915	46	38	1,774	478	403	78	2,808
1916	34	47	1,785	362	390	90	2,708
1917	39	44	2,010	463	472	71	3,099
1918	57	53	2,008	403	381	38	2,940
1919	41	51	2,134	481	467	29	3,203
1920	46	43	2,250	468	464	50	3,321
1921	48	71	2,623	557	437	32	3,768
1922	54	53	2,655	534	404	38	3,738
1923	59	53	2,818	573	499	26	4,028
Average for ten years.	45	51	2,163	469	436	52	2,216
1924	53	54	2,903	660	544	43	4,257

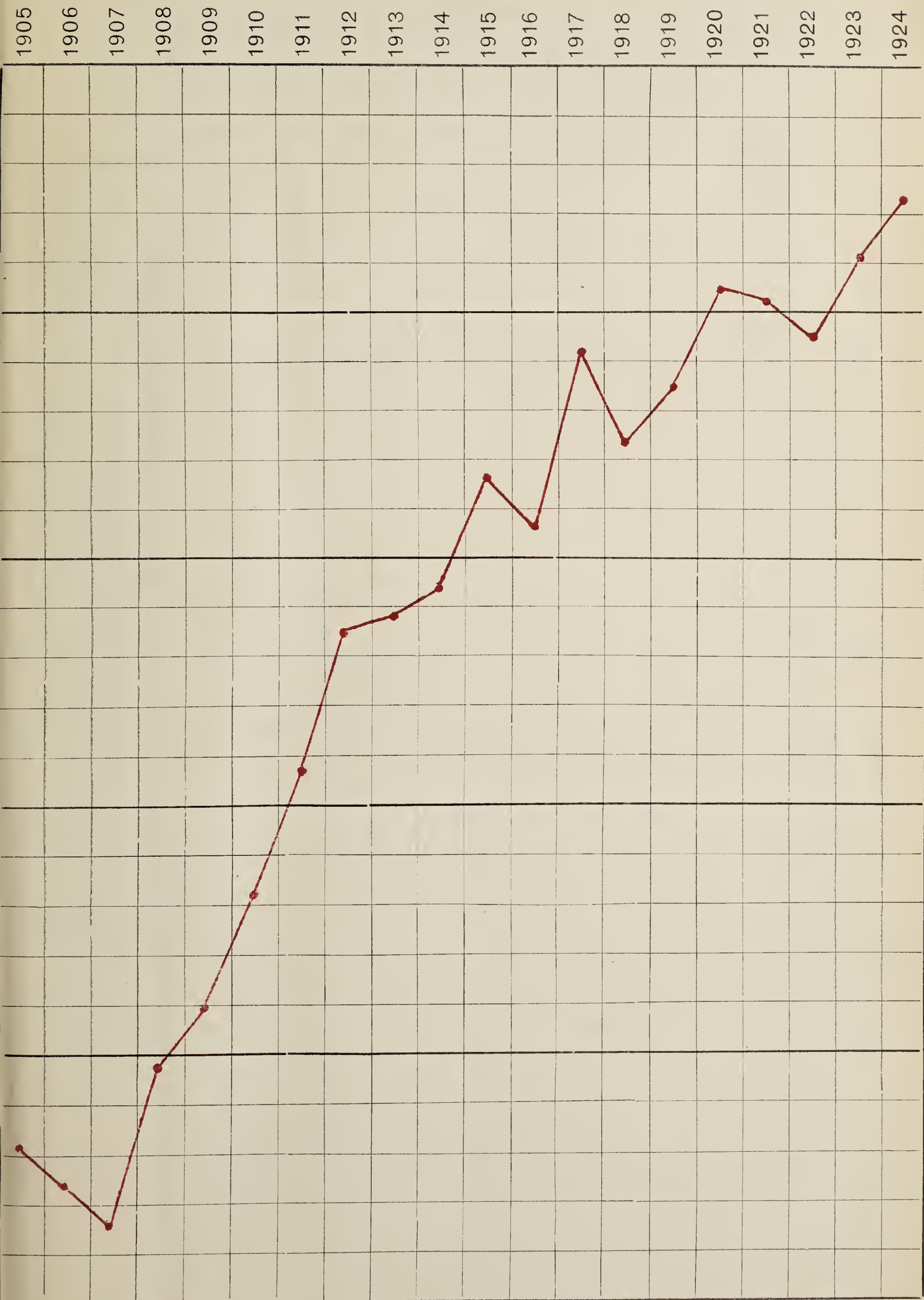
A comparison of the births and deaths in the different nationalities may be of interest:—

TABLE IV.

Nationality.	Births.	Birth rate per thousand.	Deaths.	Death rate per thousand.
European ...	53	49.35	6	5.59
Eurasian ...	54	35.71	30	19.48
Chinese ...	2,903	32.54	2,048	22.95
Malay ...	660	37.73	519	29.10
Indian ...	544	26.91	542	26.81
Others ...	43	32.98	17	13.04

PENANG MUNICIPALITY.

BIRTH RATE.



DEATHS.

3. The gross total of deaths within Municipal Limits during the year was 3811 and the crude death rate 29.13; of this number 649 were not normally resident in Penang and had been less than three months within Municipal Limits. Omitting these, we have 3162 deaths and a corrected death rate of 24.17 per thousand.

The following table shows the distribution of the deaths in age groups and nationalities:—

TABLE V.

Nationality.	Sex.	A G E S .											Total.	Grand Total.
		Under 1 year.	1 to 5 years.	5 to 15 years.	15 to 25 years.	25 to 35 years.	35 to 45 years.	45 to 55 years.	55 to 65 years.	65 to 75 years.	over 75 years.	Unknown.		
European	M.	...	...	...	...	2	1	...	...	...	...	...	3	6
	F.	...	...	...	...	...	...	...	1	2	...	...	3	
Eurasian	M.	5	1	...	2	1	...	2	1	2	1	...	15	30
	F.	1	2	...	2	2	...	1	...	5	2	...	15	
Chinese	M.	236	111	48	66	167	249	218	169	92	16	1	1373	2,048
	F.	173	95	43	44	63	56	58	52	59	31	1	675	
Malay	M.	63	39	15	20	21	36	24	28	24	11	...	281	519
	F.	41	34	14	21	27	24	12	22	22	21	...	238	
Indian	M.	68	31	11	26	72	72	36	23	16	2	...	357	542
	F.	52	15	12	21	24	22	10	9	15	5	...	185	
Other Nationalities	M.	1	1	...	...	1	...	2	1	1	...	...	7	17
	F.	1	...	...	...	2	...	...	3	2	2	...	10	
Total	M.	373	183	74	114	264	358	282	222	135	30	1	2,036	3,162
	F.	268	146	69	88	118	102	81	87	105	61	1	1,126	
Grand Total	...	641	329	143	202	382	460	363	309	240	91	2	3,162	

Compared with 1923 the Chinese deaths are less by 18, and the Indian deaths by 31, while the Malay deaths have increased by 52.

The total deaths of each nationality in the last ten years is shown here.

TABLE VI.

Year	European	Eurasian	Chinese	Malay	Indian	Others
1915	8	36	2,087	473	565	37
1916	11	35	2,119	436	527	33
1917	11	36	2,484	549	688	59
1918	9	26	2,930	479	927	56
1919	13	34	2,539	528	872	38
1920	11	44	2,398	382	676	42
1921	10	26	2,213	394	629	41
1922	12	34	2,130	464	544	46
1923	9	31	2,066	467	573	35
1924	6	30	2,048	519	542	17

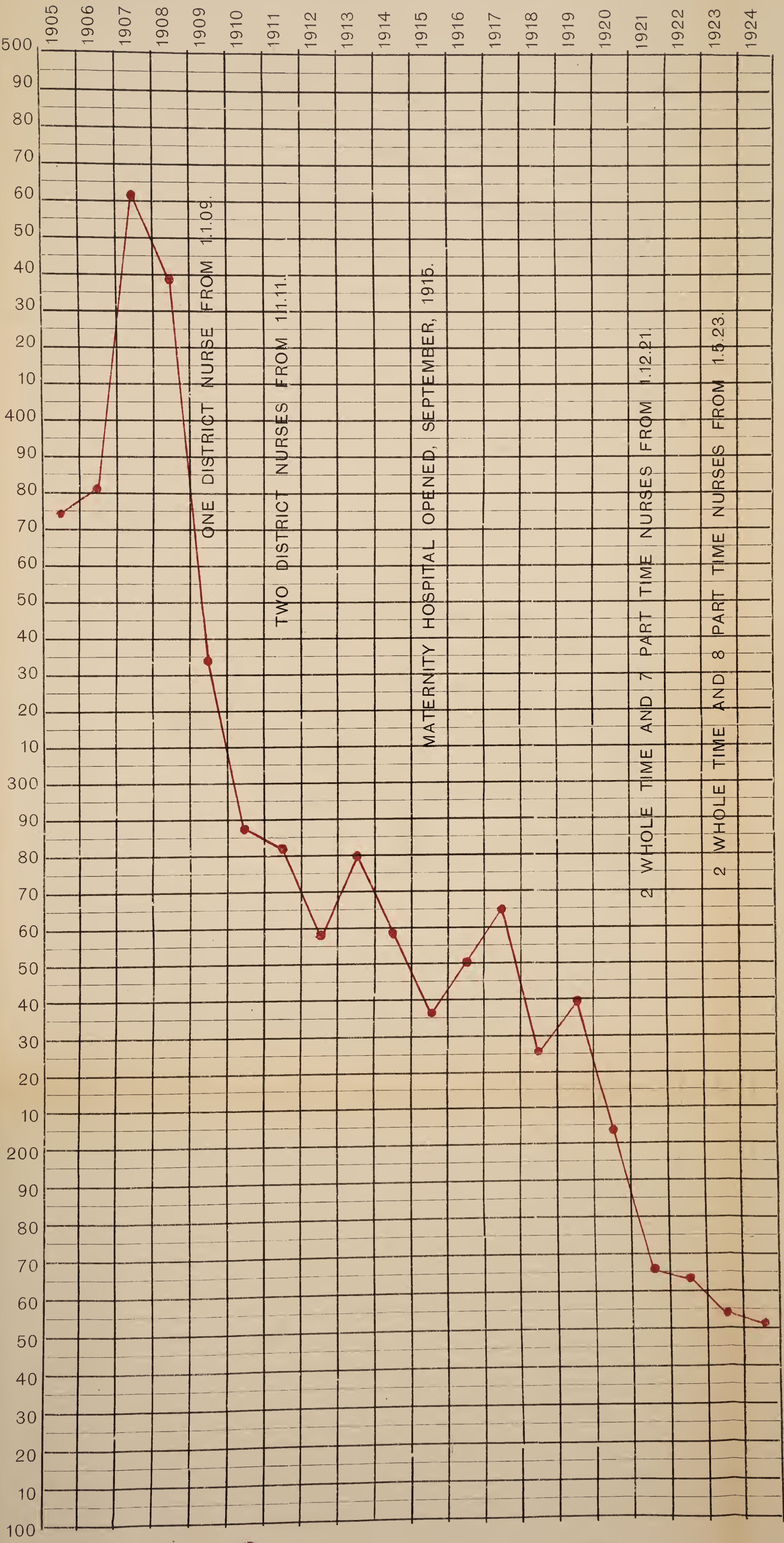
Appended is Table VII showing the infant mortality in the various nationalities and a comparison with 1923.

TABLE VII.

Nationality.			Births.	Deaths under one year.	Infant deaths per thousand Births.	
			1924		1924	1923
European	...	...	53	—	—	17
Eurasian	...	...	54	6	111	94
Chinese	...	...	2903	409	141	148
Malay	...	...	660	104	158	174
Indian	...	...	544	120	221	198
Others	...	...	43	2	47	115
TOTAL			4257	641	151	155

PENANG MUNICIPALITY.

INFANT MORTALITY.



The chief causes of infant deaths and the mortality compared with that in previous years from the same causes are given in Table VIII.

TABLE VIII.

Infant deaths per thousand births.										
	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
Tetanus ...	56	40	40	30	39	34	22	2	8	4
Intestinal diseases ...	60	63	68	61	71	54	38	36	37	23
Respiratory diseases ...	36	51	53	54	46	41	31	24	27	25
Prematurity & Debility	46	50	57	46	48	47	32	15	26	27
Convulsions ...	11	12	13	12	9	9	24	59	23	43

These causes accounted for 516 of the 641 infant deaths which occurred.

15 infants were certified as having died from tetanus and 184 were returned as having died from convulsions: the corresponding figures for 1923 are 34 and 96.

Table VIII is unreliable, the only returns that may be used with any exactitude as comparative figures are those given in Table VII.

Table IX is given to show a comparison between births, infant mortality, and general death rate for the preceding ten years and for 1924.

TABLE IX.

Year.	Estimated Population.	BIRTHS.		DEATHS UNDER 1 YEAR.		DEATHS AT ALL AGES.	
		Total	Rate per thousand population.	Total.	Rate per thousand births.	Total.	Rate per thousand population.
1914	103,664	2,545	24.55	664	260	3,577	34.50
1915	104,420	2,808	26.89	671	239	3,206	30.70
1916	105,183	2,708	25.75	692	255	3,162	30.00
1917	105,950	3,099	29.25	831	269	3,831	36.16
1918	106,723	2,940	27.55	673	229	4,430	41.50
1919	107,502	3,203	28.86	782	244	4,024	37.43
1920	108,286	3,321	30.67	681	205	3,554	32.82
1921	123,300	3,768	30.56	631	167	3,313	26.87
1922	125,834	3,738	29.71	622	166	3,230	25.67
1923	128,300	4,028	31.39	626	155	3,183	24.81
Average for the preceding ten years.	111,916	3,216	28.52	687	219	3,551	32.05
1924	130,810	4,257	32.54	641	151	3,162	24.17

CAUSE OF DEATH.

4. Table X shows the age, sex and cause of death certified; 1206 of the certificates were from Hospitals or Private Practitioners, 35 from the Coroner and 1921 from the Deputy Registrar of Deaths.

In other words less than half of the cases were under medical attention before death. As the number of post-mortem examinations made was so small as to be negligible, the diagnoses here tabulated must be accepted with reserve.

TABLE X.

DEATHS FROM	SEX.	AGES.												
		Under 1 year.	1 to 5 years.	5 to 15 years.	15 to 25 years.	25 to 35 years.	35 to 45 years.	45 to 55 years.	55 to 65 years.	65 to 75 years.	Over 75 years.	Unknown.	Total.	Grand Total.
Small pox ...	{ M. ... F. ...	...	...	...	...	...	...	...	...	...	...	...	...}	...
Enteric fever ...	{ M. ... F. ...	...	...	1	2	1	1	1	...	...	...	...	6 3}	9
Diarrhœa ...	{ M. 39 F. 33	32	3	3	2	5	1	4	2	...	...	...	91 66}	157
Dysentery ...	{ M. 3 F. ...	3	1	7	14	19	12	5	5	...	...	...	69 12}	81
Remittent fever	{ M. 1 F. ...	...	...	...	...	1	...	...	...	...	...	...	2 1}	3
Unspecified fever ...	{ M. 54 F. 27	65	29	36	46	77	53	22	4	1	...	...	387 202}	589
Syphilis ...	{ M. 5 F. 2	...	...	...	9	10	9	4	...	...	...	...	37 2}	39
Puerperal fever	F. ...	...	1	6	8	2	...	..	...	...	...	...	17	17
Other Septic diseases ...	{ M. 7 F. 6	4	1	2	6	9	7	2	4	1	...	...	43 18}	61
Phthisis ...	{ M. ... F. ...	3	5	34	106	119	71	41	10	...	...	...	389 122}	511
Other Tubercu- lar diseases ...	{ M. 1 F. ...	3	2	2	3	3	1	...	...	...	...	...	15 10}	25
Leprosy ...	{ M. ... F. ...	...	...	1	...	...	...	...	...	...	...	...	1 1}	2
Tetanus ...	{ M. 8 F. 7	...	1	...	1	3	...	...	...	...	...	...	13 7}	20
Influenza ...	{ M. 1 F. 3	1	...	1	...	1	...	2	1	...	...	...	7 8}	15
Diphtheria ...	{ M. ... F. ...	...	1	...	...	...	...	...	...	...	...	...	1 1}	2
Erysipelas ...	{ M. ... F. ...	...	...	...	...	1	...	...	...	...	...	...	1 1}	2
Whooping Cough ...	{ M. ... F. 1	...	...	...	...	...	...	...	...	...	...	...	... 1}	1
Totals to carry forward ...	{ M. 119 F. 79	111	44	88	188	249	155	80	26	2	...	...	1062 472}	1534

Deaths from	SEX.	AGES.												
		Under 1 year.	1 to 5 years.	5 to 15 years.	15 to 25 years.	25 to 35 years.	35 to 45 years.	45 to 55 years.	55 to 65 years.	65 to 75 years.	Over 75 years.	Unknown.	Total.	Grand Total.
Brought forward	{ M. F.	119 79	111 85	44 40	88 54	188 77	249 63	155 41	80 19	26 13	2 1	... ...	1062 472	1534
Malaria ...	{ M. F.	... ...	2 3	2 2	6 1	11 3	9 ...	7 3	2 1	... ...	... ...	... ...	39 13	52
Malarial Cachexia ...	{ M. F.	... ...	... ...	... ...	... ...	1 ...	... ...	1 ...	... ...	... ...	... ...	1 ...	3 ...	3
Worms ...	{ M. F.	1 ...	6 8	5 4	... 2	... 1	... ...	2 ...	2 ...	... ...	... ...	... ...	16 15	31
Rheumatism ...	{ M. F.	... ...	... ...	... 1	... 2	... 2	1 ...	... ...	... ...	... ...	... ...	... ...	1 5	6
Cancer ...	{ M. F.	... ...	... ...	1 ...	1 ...	2 ...	5 4	4 5	4 5	1 3	... 2	... ..	18 19	37
Anaemia ...	{ M. F.	... ...	... ...	... ...	... 1	... ...	1 ...	... ...	... 1	... ...	... ...	... ...	1 2	3
Beri-beri ...	{ M. F.	... ...	... ...	... ...	2 1	1 2	3 1	4 ...	1 ...	... ...	... ...	... ...	11 4	15
Premature birth	{ M. F.	27 27	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	27 27	54
Old age ...	{ M. F.	... ...	... ...	... ...	... ...	... ...	... ...	... ...	52 35	72 73	23 47	... ...	147 155	302
Convulsions ...	{ M. F.	97 87	9 9	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	106 96	202
Other diseases of Nervous system	{ M. F.	1 5	... ...	2 ...	2 1	3 ...	2 1	1 ...	2 ...	... ...	... ...	... ...	13 7	20
Circulatory System ...	{ M. F.	5 ...	1 1	2 1	7 9	11 11	21 7	39 15	37 9	18 10	4 2	... ...	145 65	210
Totals to carry forward ...	{ M. F.	250 198	129 106	56 48	106 71	217 96	291 76	213 64	180 70	117 99	29 52	1 ...	1589 880	2469

Deaths from.	Sex.	AGES.												
		Under 1 year.	1 to 5 years.	5 to 15 years.	15 to 25 years.	25 to 35 years.	35 to 45 years.	45 to 55 years.	55 to 65 years.	65 to 75 years.	over 75 years.	Unknown.	Total.	Grand Total.
Brought forward	{ M. F.	250 198	129 106	56 48	106 71	217 96	291 76	213 64	180 70	117 99	29 52	1 ...	1589 880	2469
Bronchitis ...	{ M. F.	8 4	7 5	... 1	... ...	... ...	... 1	8 3	8 10	2 ...	... 1	... ...	33 25	58
Pneumonia ...	{ M. F.	37 18	28 21	3 10	3 3	11 3	23 2	15 ...	8 ...	2 1	... ...	... ...	130 58	188
Other diseases of Respiratory system ...	{ M. F.	21 17	8 6	2 1	1 2	14 ...	18 2	8 2	9 2	5 ...	... 1	... ...	86 33	119
Enteritis ...	{ M. F.	11 8	4 6	3 3	1 1	3 ...	1 1	3 ...	... ...	... ...	... ...	... ...	26 19	45
Diseases of Liver	{ M. F.	1 1	1 ...	... ...	1 ...	5 ...	9 ...	4 2	4 2	2 ...	... ...	... ...	27 5	32
Other diseases of Digestive system ...	{ M. F.	2 2	3 ...	... 2	... ...	5 1	2 3	6 1	5 ...	... 1	... ...	... ...	23 10	33
Glandlike organs of un- certain use ...	{ M. F.	... ...	... ...	... ...	... ...	... ...	... 1	... ...	... ...	... ...	... ...	... ...	... 1	1
Urinary system	{ M. F.	1 ...	1 1	4 ...	... 4	6 9	13 4	19 2	5 1	5 3	... 1	... ...	54 25	79
Generative Organs ...	{ M. F.	... ...	... ...	... 1	... 3	... 3	... 2	... 5	2 1	... ...	... ...	... ...	2 15	17
Child birth and Abortion ...	F.	...	...	..	4	6	8	...	...	...	...	...	18	18
Bones and Joints	{ M. F.	... ...	... ...	... ...	... ...	... ...	... ...	1 ...	... ...	... ...	... ...	... ...	1 ...	1
Accident and Negligence ...	{ M. F.	... ...	1 ...	2 1	2 ...	1 ...	1 ...	... 1	... ...	... ...	... ...	... ..	7 2	9
Homicide, Suicide and Execution ...	{ M. F.	... 1	... ...	... ...	... ...	2 ...	... 1	1 ...	... ...	... ...	... ...	... ...	3 2	5
Debility ...	{ M. F.	41 19	2 1	3 2	... ...	... ...	... 1	3 1	1 1	1 1	... 5	... ...	51 31	82
Unknown ...	{ M. F.	... ...	... ...	... ...	... ...	... ...	... ...	... ...	.. ...	... ...	1 ...	... 1	1 1	2
Diabetes ...	{ M. F.	... ...	... ...	... ...	... ...	... ...	... ...	1 ...	... ...	1 ...	... 1	... ...	2 1	3
Sunstroke ...	{ M. F.	... ...	... ...	1 ...	... ...	... ...	... ...	... ...	... ...	... ...	... ..	... ...	1 ...	1
TOTALS ...	{ M. F.	373 268	183 146	74 69	114 88	264 118	358 102	282 81	222 87	135 105	30 61	1 1	2036 1126	3162

A comparison between the numbers of deaths attributed to some of the principal causes in 1924 and in the preceding ten years is shown here.

TABLE XI.

		1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	Average for preceding ten years.	1924
Phthisis	...	616	554	527	590	722	693	677	580	455	454	587	511
Pneumonia	...	205	163	203	220	559	243	235	220	266	222	254	188
Bronchitis	...	103	80	98	148	198	152	146	126	88	112	125	58
Malaria	...	469	421	473	455	478	606	505	420	134	101	406	52
Unspecified fever	...	297	258	184	239	323	68	20	116	504	524	253	589
Enteritis	...	213	202	213	266	257	318	265	186	73	97	209	9
Dysentery	...	128	163	134	147	130	188	138	115	108	75	132	81
Diarrhœa	...	80	35	20	29	30	49	23	115	147	166	69	157
Beri-beri	...	256	195	182	323	262	238	143	102	71	30	180	15
Debility	...	115	81	104	147	95	153	143	103	44	77	106	82
Tetanus	...	136	167	118	133	199	133	120	91	14	39	115	20
Old Age	...	175	145	143	198	141	174	142	173	203	274	177	302
Small-pox	...	...	8	41	7	16	142	18	2	...	...	...	...

The distribution of the chief causes of death among the various nationalities is shown in Table XII.

TABLE XII.

Certified cause of death.				European.	Eurasian.	Chinese.	Malay.	Indian.	Others.	Total.
Diarrhœa	...	...	...	...	...	139	7	11	...	157
Dysentery	...	...	...	...	1	48	8	24	...	81
Unspecified fever	...	...	...	...	2	294	168	123	2	589
Syphilis	...	...	...	...	...	34	3	2	...	39
Puerperal fever	...	...	...	...	...	7	6	4	...	17
Other Septic Diseases	...	...	...	1	2	40	4	14	...	61
Phthisis	...	...	...	...	3	369	64	72	3	511
Malaria	..	...	...	1	...	41	3	7	...	52
Beri-beri	...	...	...	...	...	12	...	2	1	15
Convulsions	...	...	...	...	1	111	49	40	1	202
Diseases of Circulatory System	...	...	...	1	8	158	23	20	..	210
Bronchitis	...	...	...	...	...	40	8	9	1	58
Pneumonia	...	...	...	...	2	126	16	44	...	188
Other Respiratory Diseases	...	...	...	...	2	82	4	31	..	119
Enteritis	...	...	...	...	...	36	1	7	1	45
Diseases of Urinary System	...	...	...	1	...	57	7	14	...	79

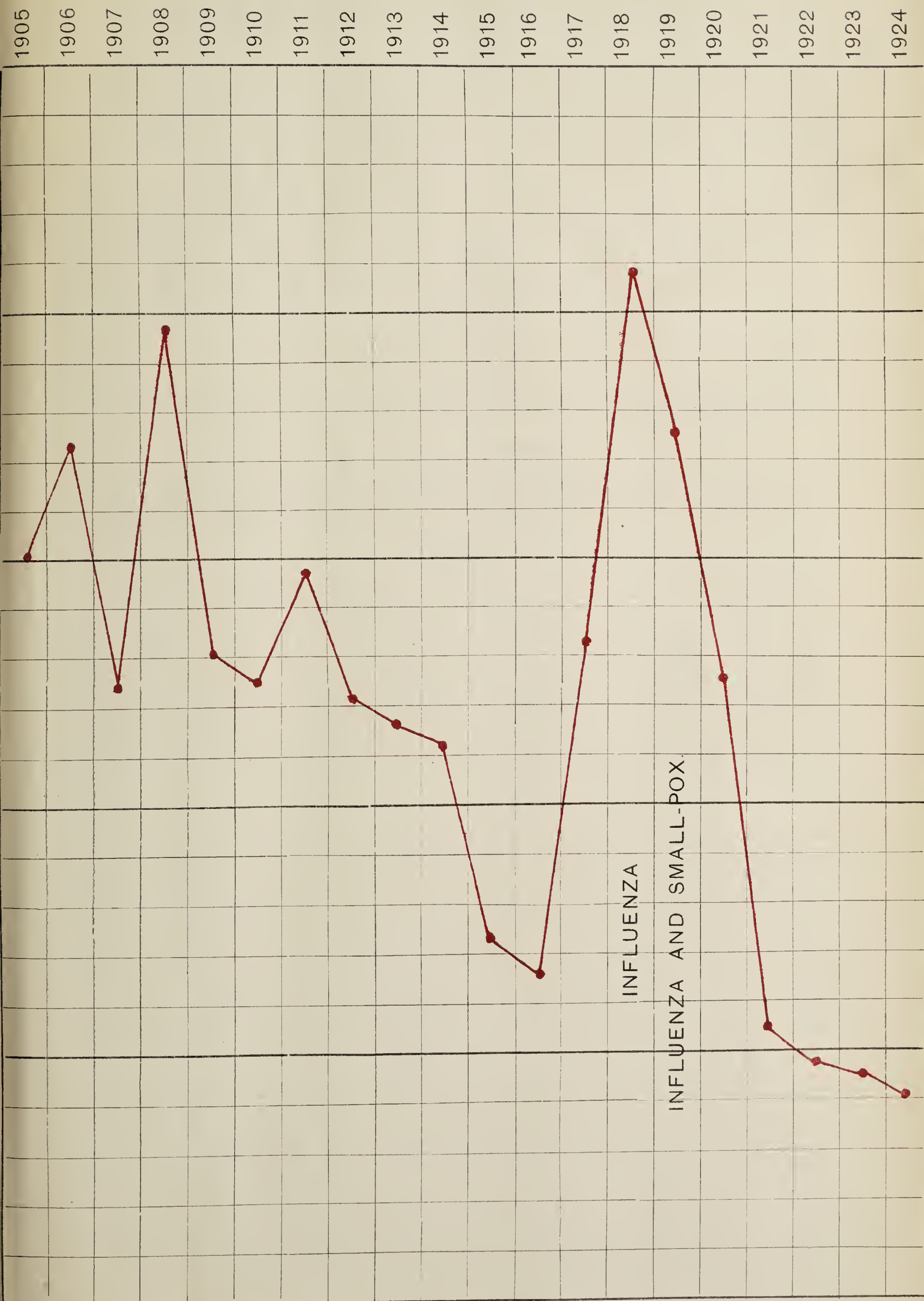
TABLE XIII.

Cause of death.				NUMBER CERTIFIED BY			
				Hospitals.	Private Practitioners.	Deputy Registrar of Deaths.	Coroner.
Enteric fever	...	...	...	1	8	...	...
Diarrhœa	...	...	...	5	24	128	...
Dysentery	...	...	...	49	17	14	1
Enteritis	...	...	...	6	20	17	2
Unspecified fever	...	...	...	2	24	563	...
Malaria	...	...	...	18	33	1	...
Phthisis	...	...	...	156	66	283	6
Bronchitis	...	...	...	4	16	38	...
Pneumonia	...	...	...	26	34	126	2
Influenza	...	...	...	2	13	...	...
Remittent fever	...	...	...	...	3	...	...
Tetanus	...	...	...	11	...	8	1
Convulsions	...	...	...	10	22	170	...
Diseases of the Circulatory system	...	...	...	72	81	55	2
Old age	...	...	...	11	10	281	...
Beri-beri	...	...	...	8	4	3	...

The total returns made by the Hospitals were 631, by private practitioners 575, by the Deputy Registrar of Deaths 1921 and by the Coroner 35; that is the Deputy Registrar of Deaths certified more than three-fifths of the total deaths.

PENANG MUNICIPALITY.

CRUDE DEATH RATE.



SEASONAL MORTALITY.

5. The deaths and death rate for each month are here recorded.

TABLE XIV.

Month.	Deaths.	Death rate per thousand.	Month.	Deaths.	Death rate per thousand.
January ...	227	20.49	July ...	292	26.36
February ...	254	24.51	August ...	268	24.20
March ...	287	25.91	September ...	226	21.08
April ...	262	24.44	October ...	269	24.29
May ...	297	26.81	November ...	240	22.39
June ...	272	24.56	December ...	268	23.66

INFECTIOUS DISEASES.

6. Table XV shows the incidence among the different nationalities of the principal infectious diseases which occurred during the year.

TABLE XV.

1924 Infectious Diseases		Small-pox.	Chicken-pox.	Enteric fever.	Tuberculosis.	Influenza.	Puerperal fever	Diphtheria.	Measles.	Whooping cough.	Erysipelas.	Total.
European	M.	...	...	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...
Eurasian	M.	...	...	...	1	...	...	...	...	...	...	1
	F.	...	1	...	2	...	...	...	...	...	...	3
Chinese	M.	1	3	8	301	6	...	1	...	...	2	322
	F.	...	2	4	87	6	10	3	...	1	1	144
Malay	M.	...	5	1	37	1	...	...	...	...	...	44
	F.	...	...	...	28	...	6	...	...	...	...	34
Indian	M.	...	32	...	64	...	...	...	3	...	...	99
	F.	...	5	...	14	2	4	...	3	...	1	29
Others	M.	...	...	...	2	...	...	...	...	...	...	2
	F.	...	...	...	1	...	...	...	...	...	...	1
Total	M.	1	40	9	405	7	...	1	3	...	2	468
	F.	...	8	4	132	8	20	3	3	1	2	181
Grand Total ...		1	48	13	537	15	20	4	6	1	4	649

VACCINATION.

7. The system of infant vaccination remained the same as in 1923: most of the work was done by two senior Sub-Inspectors and the results were satisfactory.

4257 births were reported during the year.

Our staff did 2535 primary vaccinations, other public vaccinators and private practitioners 1080, total primary vaccinations 3615; there were 676 re-vaccinations performed.

641 infants died under age of one year of whom 516 were unvaccinated.

SMALL-POX.

8. One case, an unvaccinated Chinese male aged 28 occurred within the Municipal limits during the year. An imported case of small-pox was the source of infection.

He was treated at the Infectious Diseases Hospital and recovered.

ENTERIC FEVER.

9. 13 cases were notified.

12 were Chinese of whom 9 died.

The other was a Malay: he died.

Private practitioners reported 9 fatal cases and 1 recovered case.

One case—Chinese—died at the General Hospital and two other Chinese recovered there.

10. CEREBRO-SPINAL MENINGITIS.

No case reported.

CHICKEN-POX.

11. 48 cases were reported: there were no deaths.

The Indian population again heads the list with 37 cases: the Chinese and the Malays had 5 cases each.

The Indian population is less than a fourth of the Chinese.

PLAGUE.

12. There was no case.

PUERPERAL FEVER.

13. 20 cases were reported compared to 17 in 1923.

Chinese had 10 cases, Malay 6 cases and Indians had 4 cases.

Two Chinese patients and one Malay recovered: all the others died.

INFLUENZA.

14. Under Ordinance No. 157 (Quarantine and Prevention of Disease), this is classified as a dangerous infectious disease.

15 persons were reported as having died of this disease: 12 were Chinese, 2 were Indian and one Malay.

Cases were reported every month except January and November.

All cases were notified by General Practitioners.

DIPHTHERIA.

15. 4 cases were notified: all were Chinese: their ages were 2, 2, 3 and 5 years. 2 were admitted to General Hospital in an advanced stage of the disease: they died. The other two were treated at home at an early stage of the disease: they recovered.

WHOOPING COUGH.

16. This is not notifiable as an infectious disease.

Only one case was reported, a Chinese, aged 11½ months: she died.

MEASLES.

17. This infectious disease is not notifiable under Ordinance No. 157 (Quarantine and Prevention of Disease). Each year some cases come under our attention, but the disease has never assumed epidemic proportions.

6 cases were brought to our notice: they were all Indian.

Their ages were 7/12, 2, 3, 6, 7, and 20 years.

TUBERCULOSIS.

18. From a knowledge of the gross overcrowding and ill-ventilation to be found in some parts of the town, it would be reasonable to guess that phthisis is common in Penang.

It is a great pity that exact figures are not available, for it is well to know the worst, but a study of Table XIII on page 10 leads to the impression that many probably died of phthisis who were from lack of information diagnosed by the Deputy Registrar as having died of old age or unspecified fever.

There were 511 certified deaths from phthisis, but what of the 891 deaths from old age or from unspecified fever?

Even with the obvious underestimate of 511 we have a phthisis death rate for the year of 3.9 per thousand, a rate which, though much lower than the average for the preceding ten years, compares unfavourably with 0.889 per thousand, the 1922 rate for England and Wales.

We are still trying to improve the standard of light and ventilation in dwelling houses, and to reduce overcrowding, but as there seem to be more old houses ready for knocking down than new ones being built, the overcrowding problem is far from solution.

All living quarters where a death from phthisis is reported are disinfected, and our staff give advice to the occupants of houses where cases of phthisis are known or suspected to exist.

INFECTIOUS DISEASES HOSPITAL, PERAK ROAD.

19. The reconstruction of the Hospital was not completed when the year ended.

The Eurasian Ward has been rebuilt, and new kitchens, latrines and bathing places constructed.

Electric light has been installed.

There were 105 admissions, including 41 healthy contacts.

Tables XVI and XVII shew their distribution according to disease and nationality.

TABLE XVI.

Disease.		Admitted.	Discharged.	Died.	Remaining on 31-12-24.
Small-pox	...	6	4	2	...
Chicken-pox	...	45	42	...	3
Erysipelas	...	1	1	...	...
Measles	...	7	7	...	...
Mumps	...	2	2	...	..
Adenitis	...	1	1	...	...
Vaccinia	...	1	1	...	...
Syphilis	...	1	1	...	...
Total	...	64	59	2	3

5 of the 6 Small-pox cases were admitted from outside Municipal limits.

TABLE XVII.

Nationality.		Admitted.	Discharged.	Absconded.	Died.	Remaining on 31-12-24.
Chinese	...	18	16	1	1	...
Malay	...	17	16	...	1	...
Indian	...	69	65	...	...	4
Siamese	...	1	1	...	...	...
Total	...	105	98	1	2	4

The four remaining in Hospital are Tamils, three being Chicken-pox patients and one a contact.

ANTI-MOSQUITO WORK.

20. About 130 Indian Coolies—including 25 “chokras” (boys)—were employed throughout the year.

The greater number of them worked clearing stagnant ditches, filling in pools of stagnant water and cutting down undergrowth at different places, where mosquitoes might breed or harbour.

The “chokra” (boy) gang did much valuable work collecting coconut shells, tins and other receptacles capable of holding water and breeding mosquitoes.

Four men were employed in oiling stagnant ditches and swamps.

The amount of oil used was Kerosene 360 gallons, Solar 3,705 gallons and Crude 7,865 gallons, costing \$3,235.62.

The Chief Medical Officer and the Executive Engineer (Government) were of much assistance to us in dealing with Government owned property.

The anopheline mosquitoes found during the year were *A. vagus*, *A. barbirostris*, *A. malayensis*, *A. kochi* and *A. maculatus*.

The only one of these known to be a carrier of malaria is *A. maculatus*.

They were found at the following places:—

A. barbirostris.—Kelawei Road and Cantonment Road.

A. vagus.—Kelawei Road, Patani Road, River Road, Northam Road, Sunghei Pinang Road, Jelutong Road, East Jelutong, Macalister Road, Renong ground, Transfer Road, Scott Road, Ayer Etam Road, Kinta Lane, Madras Lane, Penang Road, Lorong Slamet, Jahudi Road, Rangoon Road, Batu Lanchang Road and Tanjong Tokong Road.

A. malayensis.—Kelawei Road, Sunghei Pinang Road, Sunghei Pinang Market Garden and East Jelutong.

A. kochi.—Jelutong Road, Kelawei Road, Birch Road, East Jelutong, Scott Road, Penang Road, Lorong Slamet, Rangoon Road, Macalister Road and Northam Road.

A. maculatus.—Macalister Road and the stream “Sunghei Pinang.” These places where *A. maculatus* was found breeding are being watched and dealt with as necessary.

Other mosquitoes (*Culex* and *Stegomyia*) are still found all over the town, but they are not so numerous as in previous years.

In well supervised houses mosquitoes are now rarely troublesome—but continued and constant efforts must be made by householders and the Sanitary Staff to suppress this danger still existing and irritating.

Theatres.

21. All theatres and cinema halls were inspected once a week.

Quarters for actors were improved and extra sanitary conveniences were provided where urgently necessary.

The sanitary condition of our theatres and cinemas has been greatly improved during last few years.

WATER SUPPLY.

22. The supply was continuous, and the average daily consumption was 44 gallons per head of the estimated population; in 1923 it was 45 gallons.

The bacteriological examinations still show that the water maintains a very satisfactory standard.

The work of bringing in the new catchment area is proceeding steadily; when this is completed we should have no anxiety about either the quantity or the quality of our water supply for many years to come.

We served 44 notices requiring the closure of wells, and succeeded in getting 102 wells closed.

During the last three years 535 wells have been closed, all these being "shallow" wells, dangerous through their liability to pollution.

MEDICAL ATTENDANCE.

23. Medical advice or treatment was given to Municipal employees 2,481 times.

The total for 1923 was 2,279 and for 1922 was 2,537.

The number seen per month varied from 292 in July to 149 in April.

The number seen in the different departments were:—

Engineer 1,603, Health 295, Electrical 22, Fire Brigade 96, Jinrikisha 67, Water 214, Secretariat 112 and Veterinary 72.

DISTRICT NURSING.

24. The work was again supervised by Miss J. Ronald and Miss C. M. Gold.

Eight locally qualified midwives were employed as part time nurses.

The main part of the town is divided into eight districts: to each district a midwife is allocated: each district nurse superintendents the work in four districts.

The total number of visits and revisits made by the District Nurses and the eight midwives was over 43,000.

At the end of the year, (under the Midwives Ordinance 1923), 32 midwives were registered as Class "A", 58 as Class "B", and 14 as Class "C".

Class "C" are the local "bidans"—unqualified midwives—who were registered after the Central Midwives Board had certified that they possessed a competent practical knowledge of conducting midwifery cases.

157 babies died less than seven days old and 67 between the age of seven and fourteen days.

This is not satisfactory: I am afraid continued loss of these young lives cannot be prevented until the time allowed for the registration of a birth is reduced from fourteen days to two or three days.

Under these and other difficult conditions the district nurses and their subordinates did good work.

The infant mortality rate was reduced from 155 (1923) to 151.

The average infant mortality for the preceding ten years is 219.

SALE OF FOOD & DRUGS ACT.

MILK.

25. Following the custom of previous years only such samples were bought for analysis as shewed by lactometer that they were below the normal specific gravity.

Some 4,500 lactometer tests were made by the Laboratory Assistant and 389 by Sanitary Inspectors, five seemed to be below the standard and samples of these were bought and analysed.

Four were found to be adulterated, containing respectively 24, 25, 30, and 35 parts per cent of added water.

The vendors were prosecuted and fines amounting to \$100 were inflicted.

For similar offences previously committed, four men were convicted during 1924 and paid \$455 in fines, the heaviest fine being one of \$400 from a vendor who had gone to India in April 1921 after being caught selling watered milk.

The Sale of Food and Drugs Ordinance still allows milk vendors a clear fortnight between the service of the summons and the hearing of the case—a curious weakness in so useful an Ordinance.

The necessary interval between the taking of the milk sample and the issue of the summons is often quite enough to allow the dishonest vendor ample time to settle his affairs and escape.

One man was arrested during the year for selling milk without a licence.

217 vendors were registered after medical examination; there were 225 in 1923, and 250 in 1922.

There appears to be a growing tendency for our milk vendors to avoid gross adulteration of milk; the next step must be to induce them to provide clean milk.

How we may best encourage dairy-keepers to send out clean milk in clean vessels, is a very difficult problem.

Much of our milk comes from outside Municipal limits, and it is not possible for our present staff to supervise efficiently even the town dairies at milking time.

If all the milking were done at one central depot, or at a small number of depots, inspectors could see that the hands of the milkers and the udders and hind quarters of the cows were well washed before the milking commenced.

With such a depot system it would be possible to have the milk pasteurized in a satisfactory manner.

Since there does not seem to be any great widespread discontent with the milk supply in Penang at present, it is unlikely that the people would be willing to incur the expense of introducing a depot system.

While recognising the advantages of a depot system, I do not feel justified in pressing for its establishment in view of

- (1) the absence of any clear evidence that much disease is milkborne in Penang;

- (2) the great improvement which has occurred in various kinds of tinned milk and dried milk;

and (3) the absence or great rarity of tuberculosis in cattle in this district.

For the present, apart from our campaign against the sale of watered milk, we are continuing on the old lines of trying to improve both the general sanitation of the dairies within limits, and the cleanliness of the milk vendors and their cans.

During the year the Government Pathologist examined at our request several samples of milk taken from various sources. I quote from his last report.

“In view of the experience of the bacteriological examinations of the past few months, it is my opinion that improvement depends on supervision of the milking, and sterilization of receptacles, with the rapid cooling of the milk.

It has been found that the milk as it comes from the cows in Penang is remarkably good and the natural conclusion is that it is contaminated during the milking, or in the process of storing and transportation."

Most people in this town boil fresh milk before using, a practice which must improve satisfactorily the bacterial content whatever it may do to the vitamine-A.

GENERAL PROGRESS IN PUBLIC HEALTH.

26. A table has been prepared to present a quick view of the main facts in our vital statistics of the last twenty years.

The figures given are the simplest available. I may indicate certain factors unconnected with sanitation which influence the rates.

- (a) The proportion of females to males in the population has shown a steady tendency to increase, being now more than 3 to 5, whereas in 1905 it was approximately 3 to 9. There is therefore a certain natural increase in the birth rate.
- (b) The increase is further helped by the improvement which has taken place in the registration of births.
- (c) The infant mortality shown for the earlier years of the series is probably slightly higher than the true rate, owing to defective registration of births in those years.
- (d) Before the census of 1921, the population was greatly under-estimated. The death rates for some years before 1921 being calculated on a number smaller than the actual population is therefore higher than the actual death rate for those years.

In spite of these defects, the table undoubtedly shows that great improvement has taken place, and I may make the position clearer by one simple calculation.

The estimated population mid-1924 was 130,810. The average crude death rate for the five years 1905—1909 was 40.67. At that rate in 1924 we should have had 5,320 deaths, instead of the 3,811 which actually occurred, i.e. there was a saving in one year alone of 1,509 lives.

TABLE XVIII.

Year.	Total Number of		Birth rate.	Crude Death rate.	Infant Mortality.
	Births.	Deaths (crude)			
1905	1305	3949	13.26	40.13	379
1906	1253	4250	12.60	42.55	384
1907	1190	3776	11.84	37.59	467
1908	1519	4552	14.97	44.86	442
1909	1656	3923	16.15	38.25	337 (a)
1910	1905	3912	18.39	37.76	290
1911	2133	4045	21.02	39.88	287 (b)
1912	2421	3829	23.69	37.47	261
1913	2464	3794	23.95	36.86	284
1914	2545	3774	24.55	36.40	260
1915	2808	3390	26.89	32.46	239 (c)
1916	2708	3341	25.74	31.76	255
1917	3099	4071	29.25	38.42	269
1918	2940	4909	27.55	45.99	229
1919	3203	4466	28.86	41.54	244
1920	3321	4090	30.67	37.75	205
1921	3768	3775	30.56	30.61	167 (d)
1922	3738	3768	29.71	29.94	166
1923	4028	3801	31.39	29.62	155 (e)
1924	4257	3811	32.54	29.13	151

Note.—(a) 1st January 1909—one District Nurse.

(b) 1st January 1911—two District Nurses.

(c) September 1915—Maternity Hospital opened.

(d) 1st December 1921—two whole time and seven part time District Nurses.

(e) 1st May 1923—two whole time and eight part time District Nurses.

FINANCIAL.

27. The total expenditure of the Health Department for 1924 was \$124,238.43.

This includes everything, the Quarantine Camp, the District Nurses' Scheme, Vaccination, Anti-Mosquito Work, all pay and allowances and the Commissioners' donations to the Provident Fund of our staff.

The total receipts amounted to \$12,385.49, leaving \$111,852.94 as the cost of the department to the ratepayers.

This represents a rate of 2.06%, or a little less than five pence in the pound sterling.

The population being 130,810 the total cost of the department for the year per head of population is about 85 cents or two shillings sterling.

28. A report by the Chief Sanitary Inspector giving details of sanitary work is attached.

STAFF.

29. Dr. G. S. Glass, Deputy Health Officer, went on home leave on 1st May and resumed duty on 19th December.

W. A. Ward, Chief Sanitary Inspector, who was granted eight months leave from 31st August 1923, returned on 16th April.

M. S. d'Orville was appointed Sanitary Sub-Inspector on 18th February, vice Lim Choon Hock resigned.

The staff worked well throughout the year.

I have the honour to be,

Gentlemen,

Your obedient servant,

J. STUART ROSE, M.B., D.P.H.,

Municipal Health Officer.

PENANG, 23RD FEBRUARY, 1925.

To,

THE MUNICIPAL HEALTH OFFICER,

PENANG.

SIR,

I have the honour to submit the report of the work done by the staff during the year ending 31st December 1924.

GENERAL SANITATION.

The staff made 24,824 inspections and 25,522 reinspections.

They found 971 defective and 2016 filthy houses.

4335 notices were issued and 4346 (including 19 unserved and brought forward from 1923) were served: 4359 (including 334 outstanding on 31-12-23) have been complied with,

(Vide detailed list below).

Notices.			Outstanding on 31-12-23.	Unserved on 31-12-23.	New Notices issued 1924.	New Notices served in 1924	Unserved on 31-12-24.	Complied with.	Work started.	Cancelled.	Brought for- ward to 1925.
Nuisance	...	...	172	4	311	312	3	298	28	3	183
Lime washing	...	...	29	2	248	247	3	280	4	...	26
Latrines	...	...	7	1	43	44	...	46	...	1	4
Drains	...	...	12	1	67	67	1	70	2	1	8
Filthy premises	...	...	2	1	476	476	1	477	...	...	1
Common Lodging Houses	...	...	7	...	866	866	...	859	...	4	10
Trades	...	...	...	...	430	430	...	427	...	1	2
Bakeries	...	...	...	...	774	774	...	772	...	...	2
By-laws	...	...	10	1	5	6	...	14	1	...	2
Partitions	...	...	26	2	271	273	...	260	6	3	36
Mosquito Orders	...	...	9	4	161	165	...	167	3	...	7
Rats	...	...	2	...	17	17	...	18	...	...	1
Disinfection of infected houses	...	...	...	...	619	619	...	612	...	7	...
Wells	...	...	57	3	41	44	...	82	...	1	18
Closing Order	...	...	1	...	6	6	...	7	...	...	...
TOTAL			334	19	4335	4346	8	4359	44	21	300

21 notices were cancelled for various reasons.

298 Nuisance notices were complied with during the year dealing with 523 houses, of which 193 houses were structurally altered to provide light and ventilation, and land was set apart for back lanes or passages.

330 houses were repaired, i.e., floors, drains, roof and latrines put in order.

6 marshy lands were filled in, and 83 other nuisances dealt with. In 44 cases work has been started.

32 permits were granted to erect latrines or to construct drains.

WELLS.

44 notices under section 247 were served, and 57 brought forward from 1923, 82 were complied with; 102 wells were closed.

CEMETERIES.

The Sub-Inspector in charge visited public cemeteries 62 times, and private ones 92 times.

EXHUMATIONS.

57 applications for exhumation of bodies were received, but only 49 bodies were exhumed under special licence.

PASSENGERS.

172 passengers arrived from infected ports and passed through this office as against 113 last year.

PLANS.

247 plans were sent in and examined in this office as against 303 last year.

PROSECUTIONS.

177 summonses were issued during the year.

68 brought forward from 1923 (vide list A).

Total 245

179 convictions were obtained, including 1 milk-seller arrested for selling milk without a licence.

16 withdrawn.

2 dismissed.

49 carried forward to 1925.

Total 246 (including 1 case arrested).

37 Abatement of Nuisance, 3 Closing, and 1 Mandatory Orders were obtained.

The fines imposed by the District Judge amounted to \$1,593 against \$3,081.30 last year.

DISINFECTIONS.

614 houses were disinfected during the year, for the following causes:—

Leprosy	..	..	..	..	..	2
Erysipelas	..	..	..	..	..	2
Puerperal Fever	..	..	..	..	..	4
Diphtheria	..	..	..	..	..	2
Chicken-pox	..	..	..	..	..	11
Dysentery	..	..	..	..	..	34
Enteritis	..	..	..	..	..	34
Diarrhoea	..	..	..	..	..	131
Phthisis	..	..	..	..	..	391
Suspected Cholera	..	..	..	..	..	1
Miscellaneous	..	..	..	..	..	2
Total						614

The houses disinfected being distributed as follows:—

Suspected Cholera.—King Street (1).

Leprosy.—Aier Etam Road and Bertam Lane (1 each).

Erysipelas.—Beach Street and Noordin Street (1 each).

Puerperal Fever.—Chulia Street, Carnarvon Street, Soo Hong Lane, and Penang Road (1 each).

Diphtheria.—Cannon Square, and McNair Street (1 each).

Miscellaneous.—Western Road, and McCullum Street (1 each).

Chicken-pox.—Queen Street, Bishop Street, Patani Road, New Lane, Clarke Street, Aboo Sittee Lane, Prangin Road, Acheen Street, Macalister Road, Argyll Road, and Penang Road (1 each).

Dysentery.—Noordin Street Ghaut, and Queen Street (3 each), Kedah Road, Carnarvon Street, Prangin Road and Beach Street (2 each), York Road, West Jelutong, Perak Lane, Cheapside, Kinta Lane, Rope Walk, Hong Kong Street, Aboo Sittee Lane, Patani Road, Caunter Hall, Batu Lanchang Road, Acheen Street, Chulia Street, Gladstone Road, Carnarvon Lane, Presgrave Street, Trang Road, Kuantan Road, Bengal Lane, and Stewart Lane (1 each).

Enteritis.—Bridge Street (4), Macalister Road, Penang Road, East Jelutong and Malay Street (2 each), Cintra Street, Madras Lane, Muntri Street, Green Lane, Presgrave Street, Noordin Street, Dato Kramat Road, Jelutong Road, Cannon Square, Nanning Street, Acheen Street, Chulia Street, Campbell Street, Armenian Street, Presgrave Street Ghaut, Gaol Road, Perak Lane, Penang Street, Carnarvon Street, Soo Hong Lane, Magazine Road and Kuantan Road (1 each).

Diarrhoea.—West Jelutong (10), Chulia Street and Rope Walk (7 each), Perak Road (6), Kuala Kangsar Road, Kimberley Street and Bridge Street (5 each), Jelutong Road, Magazine Road and Campbell Street (4 each), Weld Quay, Beach Street, Noordin Street, Muntri Street and Perak Lane (3 each), Stewart Lane, Green Lane, Caunter Hall, Tek Soon Street, Carnarvon Lane, East Jelutong, Seck Chuan Lane, Presgrave Street Ghaut, Hong Kong Street, Love Lane, Bertam Lane, Dato Kramat Road, Argyll Road, and Jahudi Road (2 each), Kampong Kolam, Cintra Street, Kulim Lane, York Road, Gladstone Road, Farquhar Street, Market Street Ghaut, Prangin Lane, Maxwell Road, Sungei Pinang Road, Penang Road, Batu Lanchang, Patani Road, Green Lane, Transfer Road, Aboo Sittee Lane, Market Lane, Hutton Lane, Brick Kiln Road, Kedah Road, Macalister Road, Kampong Java Bahru, Batu Gantong, Aier Etam Road, Western Road, Cannon Square, McNair Street, Prangin Road, Keng Kwee Street, Stewart Lane, and Scotland Road (1 each).

Phthisis.—Chulia Street (18), Penang Road (16), Burmah Road (13), Bridge Street, West Jelutong and Beach Street (12 each), Perak Road (11), Transfer Road (10), Hutton Lane, Rope Walk, East Jelutong and Caunter Hall (9 each), Kedah Road, Dato Kramat Road, Jelutong Road and Campbell Street (8 each), Carnarvon Street and King Street (7 each), Prangin Road, Market Lane, Penang Street, Cannon Square and Aier Etam Road (6 each), Kampong Malabar, Argyll Road, Gladstone Road, Sungei Pinang Road, North Beach and Patani Road (5 each), Macalister Road, Kinta Lane, Noordin Street, Kuala Kangsar Road, Magazine Road, Kelawei Road, Western Road, Muntri Street, and Macalister Lane (4 each), Acheen Street, Kimberley Street, Jahudi Road, Madras Lane, China Street, Stewart Lane, Prangin Road Ghaut, Love Lane, Prangin Lane, Weld Quay, McNair Street, Rangoon Road and Aboo Sittie Lane (3 each), Sungei Ujong Road, Seh Tan Court, Tek Soon Street, Hong Kong Street, Brick Kiln Road, Victoria Street, Maxwell Road, Pitt Street, Perak Lane, Toh Aka Lane, Klang Street, Cintra Street, College Lane, Bishop Street, Seang Tek Road and Kajang Road (2 each), Tamil Street, Armenian Street, Claimant Place, Lorong Slamet, Bertam Lane, Irving Road, Cannon Street, Market Street, Singora Lane, Malacca Street, Tanjong Tokong Road, Gottlieb Road, Batu Lanchang, Scotland Road, Batu Lanchang Road, Aier Rajah Road, Kelawei Road, King Street, Church Street, Presgrave Street, Gaol Road, Siam Road, Buckingham Street, Prangin Lane, Dindings Road, Malacca Court, Malay Street, Tye Sin Street, Jones Road, Edgecumbe Road, Queen Street, Soo Hong Lane, Keng Kwee Street, Carnarvon Lane, Kampong Java Bahru, New Lane, Dato Koyah Road and Halfway Road (1 each).

TRADES.

The fees collected during the year for trade licences amounted to \$7,666.80 against \$8,079.40, a decrease of \$412.60 (vide attached list B).

COMMON LODGING HOUSES.

869 Common Lodging Houses were licensed during the year against 828 in 1923; the fees collected amounted to \$1,523.90 as against \$1,498.30, an increase of 41 houses and increased fees of \$25.60.

The staff made a night raid on 40 common lodging houses in September, 16 of them were found to be overcrowded—summonses were issued against the keepers and fines amounting to \$120 were imposed by the Magistrate.

LODGING HOUSES UNDER THE MINOR OFFENCES ORDINANCE.

26 Lodging Houses were licensed under the Minor Offences Ordinance against 22 in 1923.

MILK.

217 milk sellers were registered in 1924 against 225 in 1923—a decrease of 8.

5 samples were sent for analysis of which 4 were found to be adulterated.

9 summonses were issued (3 for selling milk adulterated with added water and 6 for offences against the By-laws).

46 cases brought forward from 1923.

—
Total 55
—

14 convictions were obtained (including 1 man arrested for selling milk without licence).

42 carried forward to 1925.

—
Total 56 including 1 case arrested.
—

Fines amounting to \$635.50 were imposed as against \$818 in 1923—a decrease of \$182.50.

The Sanitary Inspectors spent an afternoon each month in testing milk by lactometer from the various milk-sellers whom they met in the different parts of the town.

Over 350 samples were tested during the year.

VACCINATION.

Our vaccinators made 2,535 primary and 615 secondary vaccinations; 1,110 tubes of lymph were used at a cost of \$333.

Private practitioners and public vaccinators made 1,080 primary and 61 secondary vaccinations.

Anti-Mosquito Works.

The Anti-Mosquito gangs did good work, cutting down vegetation, digging, levelling and clearing ditches, collecting old tins, coconut shells and burying them at Dato Kramat, Waterfall Ayer Rajah, Perak, Burmah, Gottlieb, Brown, Scott, Scotland, Macalister, Brick Kiln, Anson, Patani, Seang Tek, Siam, Trang, Barrack, Contonment, Kelawei, Krian, Larut, Jahudi, Pahang, Sungei Pinang, York, Jelutong, East Jelutong, Batu Lanchang, Bell, Hogan, Adam, and Barnett Roads, Ayer Itam behind Ayer Itam Road private market and Sungei Mati, Kinta, Singora, Green and Bagan Jermal Lanes, Lorong Slamet, Westlands and Babington Avenue; they also cleared the river banks from the Chetty's Temple to Perak Road Bridge and from Sungei Mati up to Batu Lanchang: before and after the Thaipusam they cleared up the ground in the vicinity of the Temple.

The Chokra gang under Sub-Inspector Peters went through the Town Area destroying and clearing up the breeding places of mosquitoes generally.

All ditches, pools and swamps within Town Area and the Race Course were regularly sprayed with kerosene, solar oil and crude oil once a week; 360 gallons of kerosene, 3,705 gallons of solar oil, and 7,865 gallons of crude oil were used: the cost was \$192, \$1,179.90, and \$1,863.72 respectively.

The gangs also cleared up private lands at the cost of the owners.

Staff.

I returned from leave and resumed duty on 16th April.

S. S. I. Lim Choon Hock resigned on 1st February.

S. S. I. M. S. d'Orville joined the service on 18th February.

The staff worked satisfactorily throughout the year.

I have the honour to be.

Sir,

Your obedient servant,

W. A. WARD.

A

Prosecutions.	B. forward from 1923.	Issued in 1924.	Cases in Court.	Convictions.	Withdrawn.	Dismissed.	A. N. O.	C. O.	P. O.	M. O.	Total orders obtained.	Fines.		Costs.	
												£	cts.	£	cts.
Nuisance Notice ...	9	46	51	46	5	...	37	2	...	...	39	25	00	23	00
Nuisance Orders ...	3	7	8	7	1	...	...	1	...	...	1	265	00	†5	00
Drains and Latrines ...	...	6	6	6	...	...	...	...	...	1	1	8	00	3	00
Trades ...	...	19	19	18	1	...	...	...	...	...	...	65	00	9	00
Common Lodging Houses ...	...	29	29	26	3	...	...	...	...	...	...	174	00	‡15	00
Breach of C.L.H. by-laws...	...	17	17	17	...	...	...	...	...	...	...	150	00	8	50
Filthy premises ...	...	8	8	8	...	...	...	...	...	...	...	80	00	4	00
Secs. 160/161 ...	...	4	4	3	1	...	...	...	...	...	...	...	...	1	50
Bakery By-laws ...	5	20	25	21	4	...	...	...	...	...	...	98	50	10	50
Milk ...	46	9	*14	*14	...	...	...	...	...	...	...	635	50	41	50
Failing to report Birth ...	2	4	5	3	1	1	...	...	...	...	...	6	00	1	50
Failing to report Death ...	...	2	2	2	...	...	...	...	...	...	...	1	00	1	00
Breach of pig by-laws ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Breach of Cattleshed by-laws ...	1	1	2	1	...	1	...	...	...	...	...	...	...	...	50
Lime Washing ...	...	4	4	4	...	...	...	...	...	...	...	36	00	2	00
Failing to report Infectious disease ...	...	1	1	1	...	...	...	...	...	...	...	10	00	...	50
Mosquitoes ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Closing orders ...	1	...	1	1	...	...	...	...	...	...	...	19	50	...	50
Ejectment orders ...	1	...	1	1	...	...	...	...	...	...	...	19	50	...	50
Wells ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL ...	68	177	197	179	16	2	37	3	...	1	41	1593	00	127	50

* Including 1 case arrested for selling milk without licence.

† Including 1 warrant fee £1/-

‡ Including 2 warrant fees £2/-

B

Trade Licenses 1924.	No. 1923.	Fees		No. 1924.	Fees		No. Increase.	Fees		No. Decrease.	Fees	
		\$	cts.		\$	cts.		\$	cts.		\$	cts.
Coal Dépôt ...	2	24	00	2	24	00	...	...	...	...	...	...
Charcoal Dépôt ...	36	216	00	33	198	00	...	...	...	3	18	...
Candle Factory ...	16	128	00	17	136	00	1	8	00	...	...	...
Cattleshed and Cattle ...	107	613	00	100	466	00	...	...	...	7	147	00
Wood Dépôt ...	76	456	00	74	444	00	...	...	...	2	12	00
Dyeing House ...	5	50	00	4	40	00	..	...	...	1	10	00
Fish Storing and Curing ...	43	516	00	38	456	00	...	...	...	5	60	00
Braziers, Foundries and Smithies ...	57	114	00	57	114	00	...	...	...	...	...	...
Pig Stys ...	56	112	00	53	106	00	...	...	...	3	6	00
Pig Stys (Free) ...	396	...	...	402	...	...	6	...	...	...	...	...
Pepper Washing Factory ...	2	20	00	1	10	00	...	...	...	1	10	00
Pottery Making ...	...	...	...	1	2	00	1	2	00	...	...	...
Rags, Bones and Feathers ...	5	60	00	5	60	00	...	...	...	...	...	...
Soap Factory ...	13	104	00	13	104	00	...	...	...	...	...	...
Stables and Horses ...	...	...	...	2	11	00	2	11	00	...	...	...
Sheep and Goats ...	10	31	40	7	27	80	...	...	...	3	3	60
Tanneries ...	19	456	00	17	408	00	...	...	...	2	48	00
Blachan Factories ...	2	24	00	2	24	00	...	...	...	...	...	...
Bakeshops ...	40	200	00	43	215	00	3	15	00	...	...	...
Cookshop ...	196	980	00	180	900	00	..	...	...	16	80	00
Eatingshops ...	640	3,200	00	639	3,195	00	...	...	...	1	5	00
Storing and Curing Hides ...	5	60	00	3	36	00	...	...	...	2	24	60
Sago Factory ...	1	10	00	1	10	00	...	...	...	...	...	...
Atap, Kajang and Straw ...	45	135	00	45	135	00	...	...	...	...	...	...
Sugar Boiling ...	13	78	00	12	72	00	...	...	...	1	6	00
Market Gardens ...	31	...	...	36	...	...	5	...	...	...	...	...
Drying Cloth ...	2	10	00	1	5	00	...	...	...	1	5	00
Milk Sellers ...	225	225	00	217	217	00	...	...	...	8	8	00
Lodging Houses (Minor Offences Ord.) ...	22	22	00	26	26	00	4	4	00	...	...	...
Fresh Fish and Meat ...	47	235	00	45	225	00	...	...	...	2	10	...
Total ...	2,112	8,079	40	2,076	7,666	80	22	40	00	58	452	60
Common Lodging Houses ...	828	1,498	30	869	1,523	90	41	25	60	...	...	...

